

**Product Description Document**  
**Frost/Freeze Program Headline Consolidation**  
**November 2021**

**Part 1 – Mission Connection**

**a) Product Description:**

The National Weather Service (NWS) is exploring the consolidation of Hard Freeze and Freeze Watch/Warning products. Specifically, the Hard Freeze Watch and Hard Freeze Warning headlines would be removed in favor of including Hard Freeze language within the body of Freeze Watch and Freeze Warning products when appropriate. This proposal is intended to simplify and improve Frost/Freeze messaging and service delivery. The following is a list of the five current products as well as their national criteria guidelines.

Proposed for Removal:

*Hard Freeze Watch:* Conditions are favorable for a freeze event to meet or exceed Hard Freeze Warning criteria in the next 12 to 48 hours during the locally defined growing season.

*Hard Freeze Warning:* Minimum shelter temperature is forecast to be 28°F or less during the locally defined growing season.

Proposed to Retain:

*Frost Advisory:* Minimum shelter temperature is forecast to be 33°F to 36°F during the locally defined growing season, on nights with light winds and clear skies.

*Freeze Watch:* Conditions are favorable for a freeze event to meet or exceed Freeze Warning criteria in the next 12 to 48 hours during the locally defined growing season.

*Freeze Warning:* Minimum shelter temperature is forecast to be 32°F or less during the locally defined growing season.

As part of this proposal, forecasters may add enhanced language within the body of the message when a Freeze Watch/Warning is issued for a minimum shelter temperature forecast to be 28°F or less during the locally defined growing season.

**b) Purpose/Intended Use:**

Social science research supporting the NWS Hazard Simplification (Haz Simp) project has indicated that there are too many products within the Watch, Warning, and Advisory (WWA) system, which can cause public and partner confusion. Currently, there are five Non-Precipitation Weather (NPW) products within the Frost/Freeze product suite. These products are not always used consistently across the NWS, which can result in inconsistent

service delivery. This proposal eliminates two of the five headlines in favor of more direct and consistent messaging/service delivery.

Additionally, multiple rounds of feedback both internally and externally have informed this final proposal. Internal NWS surveys garnered support for a change to the frost/freeze headlines citing that collaborating these headlines is a significant challenge across offices and regions. From an external perspective, a public survey found that of the five existing products, people are least familiar with Hard Freeze Watch/Warning and that these headlines are also least important for decision making purposes (when compared to the other three).

**c) Audience/Users:**

Agricultural community, climate services partners, and general public

**d) Presentation Format:**

Hard Freeze Watch, Hard Freeze Warning, Freeze Watch, Freeze Warning, and Frost Advisory are text based products, which appear on the Watch, Warning, and Advisory page on Weather.gov and all other standard dissemination methods.

**e) Feedback Method:**

Several mechanisms for feedback have already been employed to inform this final proposal:

- 1) Multiple internal surveys were conducted and it was found that a large majority of Weather Forecast Offices (WFOs) favored simplification of the Frost/Freeze headlines.
- 2) The NWS released a public survey in Fall 2020 and found that of the five existing products, people are least familiar with Hard Freeze Watch/Warning. These headlines were also least important for decision making purposes.

The NWS is now accepting comments on a final proposal for frost/freeze headline simplification from November 18, 2021 - December 18, 2021.

<https://www.surveymonkey.com/r/freezeproposal>

For further information, please contact:

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## Part 2 – Technical Description

**a) Format and Science Basis:** Below are examples of the products proposed to be removed: Hard Freeze Watch and Hard Freeze Warning. Also included is the Hard Freeze Warning shown as a Freeze Warning with enhanced wording. This serves as an example of how a Freeze Warning could look with descriptive language in the “What” bullet to indicate lower temperatures.

### Current: Hard Freeze Watch

URGENT - WEATHER MESSAGE

National Weather Service Salt Lake City UT

329 PM MDT Wed Apr 15 2020

UTZ001-002-160700-

/O.NEW.KSLC.HZ.A.0001.200417T0500Z-200417T1500Z/

Cache Valley/Utah Portion-Northern Wasatch Front-

Including the cities of Logan, Ogden, and Bountiful

329 PM MDT Wed Apr 15 2020

...HARD FREEZE WATCH IN EFFECT FROM THURSDAY EVENING THROUGH  
FRIDAY MORNING...

\* WHAT...Temperatures as low as 25F possible.

\* WHERE...Cache Valley/Utah Portion and Northern Wasatch Front.

\* WHEN...From Thursday evening through Friday morning.

\* IMPACTS...Frost and freeze conditions could kill crops and other  
early season sensitive vegetation.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

Take steps now to protect tender plants from the cold.

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### Current: Hard Freeze Warning

URGENT - WEATHER MESSAGE

National Weather Service New Orleans LA

731 PM CST Fri Dec 25 2020

LAZ039-040-MSZ070-071-077-080>082-260945-

/O.NEW.KLIX.HZ.W.0001.201226T0600Z-201226T1400Z/

Washington-St. Tammany-Pike-Walthall-Pearl River-Hancock-Harrison-

Jackson-

Including the cities of Bogalusa, Enon, Franklinton, Slidell, Mandeville, Covington, Lacombe, McComb, Dexter, Salem, Tylertown, Crossroads, McNeil, Poplarville, Picayune, Bay St. Louis, Waveland, Diamondhead, Gulfport, Pascagoula, Ocean Springs, Moss Point, Gautier, and St. Martin

731 PM CST Fri Dec 25 2020

...HARD FREEZE WARNING IN EFFECT FROM MIDNIGHT TONIGHT TO 8 AM CST SATURDAY...

\* WHAT...Sub-freezing temperatures as low as 24 expected.

\* WHERE...In Mississippi, Pike, Walthall, Pearl River, Hancock, Harrison and Jackson Counties. In Louisiana, Washington and St. Tammany Parishes.

\* WHEN...From midnight tonight to 8 AM CST Saturday.

\* IMPACTS...Frost and freeze conditions will kill crops, other sensitive vegetation and possibly damage unprotected outdoor plumbing.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

Take steps now to protect tender plants from the cold. To prevent freezing and possible bursting of outdoor water pipes they should be wrapped, drained, or allowed to drip slowly. Those that have in-ground sprinkler systems should drain them and cover above-ground pipes to protect them from freezing.

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### **Proposed New Format: Freeze Warning (with enhanced language to indicate lower temperatures)**

URGENT - WEATHER MESSAGE

National Weather Service New Orleans LA

731 PM CST Fri Dec 25 2020

LAZ039-040-MSZ070-071-077-080>082-260945-

/O.NEW.KLIX.FZ.W.0001.201226T0600Z-201226T1400Z/

Washington-St. Tammany-Pike-Walthall-Pearl River-Hancock-Harrison-Jackson-

Including the cities of Bogalusa, Enon, Franklinton, Slidell, Mandeville, Covington, Lacombe, McComb, Dexter, Salem, Tylertown, Crossroads, McNeil, Poplarville, Picayune, Bay St. Louis, Waveland, Diamondhead, Gulfport, Pascagoula, Ocean Springs,

Moss Point, Gautier, and St. Martin  
731 PM CST Fri Dec 25 2020

...FREEZE WARNING IN EFFECT FROM MIDNIGHT TONIGHT TO 8 AM  
CST SATURDAY...

\* WHAT...Hard Freeze with temperatures as low as 24 expected.

\* WHERE...In Mississippi, Pike, Walthall, Pearl River, Hancock,  
Harrison and Jackson Counties. In Louisiana, Washington and  
St. Tammany Parishes.

\* WHEN...From midnight tonight to 8 AM CST Saturday.

\* IMPACTS...Frost and freeze conditions will kill crops, other  
sensitive vegetation and possibly damage unprotected outdoor  
plumbing.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

Take steps now to protect tender plants from the cold. To prevent  
freezing and possible bursting of outdoor water pipes they should  
be wrapped, drained, or allowed to drip slowly. Those that have  
in-ground sprinkler systems should drain them and cover above-  
ground pipes to protect them from freezing.

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**b) Training:** Appropriate forecaster training, as well as outreach materials will be provided should the proposal move forward.

**c) Availability:**

The product/service is available at: <https://www.weather.gov> for WWA text products.